

REMARKS

Applicants thank the Examiner for considering the references cited with the Information Disclosure Statement filed December 18, 2003.

Status of the Application

Claims 2, 4-9, 11-13 and 15-28 are all the claims pending in the Application. Claims 2, 4, 11 and 16 are hereby rewritten in independent form, claims 1, 3, 10 and 14 are hereby cancelled without prejudice or disclaimer, and claims 21-28 are hereby added. Claims 12, 13 and 19 are amended to depend from independent claim 2, while claim 15 is amended to depend from independent claim 16. Claims 1-4, 6 and 9-20 have been rejected. Claims 5, 7 and 8 are withdrawn from consideration.

Obviousness Rejection

The Examiner has rejected: (1) claims 1-4, 10, 12-14, 16 and 19 under 35 U.S.C. § 103(a) as being unpatentable over *Hayakawa et al.* (US 4,478,595; hereinafter “*Hayakawa*”) in view of *Bartos et al.* (US 4,758,208; hereinafter “*Bartos*”); (2) claims 6, 9, 17 and 18 under 35 U.S.C. § 103(a) as being unpatentable over *Hayakawa* in view of *Bartos* and further in view of *Trzmeil et al.* (US 5,606,941; hereinafter “*Trzmeil*”); and (3) claim 11 under 35 U.S.C. § 103(a) as being unpatentable over *Hayakawa* in view of *Bartos* and further in view of *Foster et al.* (US 4,454,236; hereinafter “*Foster*”). These rejections are respectfully traversed.

Independent Claim 2

As noted above, claim 2 (now rewritten in independent form) stands rejected as being unpatentable over *Hayakawa* in view of *Bartos*.

However, Applicants respectfully submit that, even if it would have been possible to modify *Hayakawa* in view of *Bartos* as the Examiner alleges, the resultant combination would still fail to teach or suggest that the “tension adjuster is disposed in an area in which a slack of said belt occurring when said engine is started by said rotating electric machine becomes the greatest,” as recited in claim 2.

As an initial matter, Applicants note that the Examiner has not specifically indicated where or how either *Hayakawa* or *Bartos* discloses such features, and has merely alluded in the “Response to Arguments” section of the instant Office Action that “the apparatus of *Hayakawa* in view of the teachings of *Bartos et al.* would produce a workable mechanism providing appropriate belt tensioning at necessary locations (as further taught by *Bartos et al.*)” (pg. 5, lines 14-16).

Thus, the Examiner still has not met his burden to establish a *prima facie* case. The mere disclosure of belt tensioning “at necessary locations” clearly fails to teach or suggest an arrangement “in an area in which a slack of said belt occurring when said engine is started by said rotating electric machine becomes the greatest,” as recited in claim 2.

Turning to the applied references, *Hayakawa* discloses the simple arrangement of belt tensioner 1 between pulleys 6 and 7, both of which are connected to accessory devices (see FIG. 1). *Hayakawa* does not provide any indication of relatively high or low slack portions of belt 2. Therefore, *Hayakawa* cannot reasonably be read as being at all concerned with the placement of its belt tensioner 1 with respect to any area where the slack of belt 2 is the greatest.

Bartos discloses a stargen 10 / idler pulley 40, 42 combination for alternately applying tension to slack sides of a belt. *Bartos* also does not provide any indication of relatively high or

low slack portions its belt 18, only that the slack and tight side of belt 18 alternate based on the direction of operation of stargen 10. In fact, Applicants respectfully submit that the pulleys 40, 42 of *Bartos* are arranged to providing a compact system, and not specifically to act at an area where the slack of belt 18 is the greatest. Therefore, *Bartos* cannot reasonably be read as being at all concerned with the placement of pulleys 40, 42 with respect to any area where the slack of belt 18 is the greatest.

Thus, Applicants respectfully request the withdrawal of this rejection.

Independent Claim 4

As noted above, claim 4 stands rejected as being unpatentable over *Hayakawa* in view of *Bartos*.

However, Applicants respectfully submit that, even if it were possible to modify *Hayakawa* in view of *Bartos* as the Examiner has alleged, neither of the applied references teach or suggest claim 4's recitation of:

a push rod extending through the first axial end wall, for urging said pulley unit with a reactive force generated upon elastic deformation of said spring, comprising a planar disk portion having an outer diameter equivalent to an inner diameter of the housing; and
an elastic deformation unit, for elastically deforming said spring, comprising a planar disk portion having an outer diameter equivalent to an inner diameter of the housing;
wherein the elastically deformable spring is arranged between said disk portion of said piston and said disk portion of said push rod.

For example, the portion alleged by the Examiner to correspond to the recited "elastic deformation unit" (stepper motor 31, pinion 32 and spur gear 35) fails to provide any feature that could reasonably be read as a "planar disk portion having an outer diameter equivalent to an inner diameter of the housing."

Thus, Applicants respectfully submit that independent claim 4 is patentable over the applied references. Further, Applicants respectfully submit that rejected dependent claims 6-9 are allowable, *at least* by virtue of their dependency.

Thus, Applicants respectfully request that the Examiner withdraw this rejection.

Independent Claim 11

As noted above, claim 11 stands rejected as being unpatentable over *Hayakawa* in view of *Bartos* and further in view of *Foster*.

However, Applicants respectfully submit that, even if it were possible to modify *Hayakawa* in view of *Bartos* and *Foster* as the Examiner has alleged, none of the applied references teach or suggest that “the position of said push rod is set by a signal from a central processing unit which processes information comprising, at least, an rpm of said engine, an engine starting signal, a vehicle speed, and the tension of said belt,” as recited in claim 11.

Specifically, as the Examiner seems to concede, not one of the applied references discloses the setting of a position of the push rod by taking into account vehicle speed. Nevertheless, the Examiner alleges that *Hayakawa* discloses “a central processing unit 9 which sets the position of said push rod based on an rpm of said engine, inherently on a vehicle speed if it adjusts the position of said push rod based on the rpm of said engine” (pg. 2, lines 17-19).

Further, in the “Response to Arguments” section of the instant Office Action, the Examiner confusingly takes the opposite position, alleging that “*Hayakawa* processes vehicle speed and thus engine rpm, without engine rpm there would be no vehicle speed, i.e., it is rpm that produces vehicle speed; thus processing information regarding one inherently produced information regarding the other” (pg. 6, lines 15-17). However, it is clear that *Hayakawa* fails to

disclose any processing of vehicle speed. Thus, the Examiner's reasoning in this section is completely unsupported.

In any event, the gist of the Examiner's argument seems to be that *Hayakawa's* disclosure of the use of RPM data inherently discloses the use of vehicle speed data. However, this argument is incorrect.

It has long been held that "to establish inherency, the extrinsic evidence 'must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill.' *Continental Can Co. v. Monsanto Co.*, 948 F.2d 1264, 1268, 20 U.S.P.Q.2D (BNA) 1746, 1749 (Fed. Cir. 1991). 'Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.' *Id.* at 1269, 20 U.S.P.Q.2D (BNA) at 1749 (quoting *In re Oelrich*, 666 F.2d 578, 581, 212 U.S.P.Q. 323, 326 (C.C.P.A. 1981)." *In re Robertson*, 169 F.3d 743, 745 (Fed. Cir. 1999).

As explained multiple times throughout the prosecution of this Application, there is no direct relationship between rpm of an engine and the speed of a vehicle. It is well understood that the speed of a vehicle is generally determined by many factors including, *inter alia*, gear ratios in the transmission, and whether the engine is under load or not. An illustrative example of this relationship is, shown by the proposition that a vehicle in third gear with an engine turning 2,000 RPM is likely traveling slower than a vehicle in fourth gear when the engine is again turning 2,000 RPM. Further, a slowing vehicle will likely have a constant RPM while speed decreases, as engines are normally decoupled from transmissions as the vehicle slows.

Thus, these illustrative examples clearly show that engine RPM does not directly vary with speed in any manner that would allow the easy determination of vehicle speed using engine RPM. These difficulties and variables are precisely why vehicle speed sensors are used, and speed of vehicles is not determined from RPM.¹

Thus, it is clear that the Examiner's allegation that vehicle speed could somehow be determined from RPM is a mere allegation of possibility, and is not necessarily present in *Hayakawa* so that such a feature could be considered inherent.

Thus, Applicants respectfully request that the Examiner withdraw this rejection.

Independent Claim 16

As noted above, claim 16 stands rejected as being unpatentable over *Hayakawa* in view of *Bartos*.

However, Applicants respectfully submit that, even if it were possible to modify *Hayakawa* in view of *Bartos* as the Examiner has alleged, neither of the applied references teach or suggest claim 16's recitation of:

a piston, which is axially movable within said cylindrical housing, comprising a planar disk portion having an outer diameter equivalent to an inner diameter of the cylindrical housing;
a push rod, which is axially movable within said cylindrical housing and extending extends through one of said axial end walls to contact said pulley unit, comprising a planar disk portion having an outer diameter equivalent to an inner diameter of the cylindrical housing;
a first elastically deformable spring arranged between said disk portion of said piston and said disk portion of said push rod

For example, although the Examiner has not specifically indicated which portion of

Hayakawa or *Bartos* he believes corresponds to the recited "piston," it is clear that no portion

¹ Applicants note that the Examiner has not provided even a single reference that supports his allegation.

that could reasonably be compared to this feature provides a “planar disk portion having an outer diameter equivalent to an inner diameter of the housing.”

Thus, Applicants respectfully submit that independent claim 16 is patentable over the applied references. Further, Applicants respectfully submit that rejected dependent claims 15-18 are allowable, *at least* by virtue of their dependency.

Thus, Applicants respectfully request that the Examiner withdraw this rejection.

New Claims

Claims 21-28 are hereby added. Claims 21-28 are fully supported *at least* by FIG. 5 of the instant Application (and its accompanying description). Claims 21-27 are respectfully submitted to be allowable *at least* by virtue of their dependency, and claim 28 is respectfully submitted to be allowable in view of at least the above arguments for the patentability of claims 4 and 16.

Conclusion

In view of the foregoing, it is respectfully submitted that claims 2, 4-9, 11-13 and 15-28 are allowable. Thus, it is respectfully submitted that the application now is in condition for allowance with all of the claims 2, 4-9, 11-13 and 15-28.

If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

Amendment Under 37 C.F.R. § 1.111
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Please charge any fees which may be required to maintain the pendency of this application, except for the Issue Fee, to our Deposit Account No. 19-4880.

Respectfully submitted,



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